

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

FISHER ADAMS KELLY  
Level 13  
Amp Place  
10 Eagle Street  
Brisbane, QLD 4000  
AUSTRALIE

Date of mailing (day/month/year) 10 April 2001 (10.04.01)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference 2/7460/PC-MS	
International application No. PCT/AU99/00934	International filing date (day/month/year) 27 October 1999 (27.10.99)

1. The following indications appeared on record concerning:

☒ the applicant
     
 ☐ the inventor
     
 ☐ the agent
     
 ☐ the common representative

Name and Address

ASTRACON INC  
Suite 250  
10303 East Dry Creek Road  
Englewood, CO 80112  
United States of America

State of Nationality

US

State of Residence

US

Telephone No.

Facsimile No.

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person
     
 ☐ the name
     
 ☒ the address
     
 ☐ the nationality
     
 ☐ the residence

Name and Address

ASTRACON INC  
6560 S. Greenwood Plaza Blvd.  
Suite 200  
Englewood, CO 80111  
United States of America

State of Nationality

US

State of Residence

US

Telephone No.

Facsimile No.

Teleprinter No.

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

A. Karkachi

Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

To:

FISHER ADAMS KELLY  
Level 13  
Amp Place  
10 Eagle Street  
Brisbane, QLD 4000  
AUSTRALIE

Date of mailing (day/month/year) 10 April 2001 (10.04.01)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference 2/7460/PC-MS	
International application No. PCT/AU99/00934	International filing date (day/month/year) 27 October 1999 (27.10.99)

1. The following indications appeared on record concerning:		
<input checked="" type="checkbox"/> the applicant	<input checked="" type="checkbox"/> the inventor	<input type="checkbox"/> the agent <input type="checkbox"/> the common representative
Name and Address ROSE, Ian, Alexander 16 Pedley Street Wavell Heights, QLD 4012 Australia	State of Nationality AU	State of Residence AU
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:		
<input type="checkbox"/> the person	<input type="checkbox"/> the name	<input checked="" type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence
Name and Address ROSE, Ian, Alexander 15 Harriet Street Red Hill, QLD 4059 Australia	State of Nationality AU	State of Residence AU
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
3. Further observations, if necessary:		
4. A copy of this notification has been sent to:		
<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned	
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned	
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:	

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer A. Karkachi
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

# PATENT COOPERATION TREATY

**PCT**

## NOTIFICATION CONCERNING SUBMISSION OR TRANSMITTAL OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

FISHER ADAMS KELLY  
Level 13  
Amp Place  
10 Eagle Street  
Brisbane, QLD 4000  
AUSTRALIE

RECEIVED  
BY: 27 JAN 2000

Date of mailing (day/month/year) 12 January 2000 (12.01.00)	
Applicant's or agent's file reference 2/7460/PC-MS	<b>IMPORTANT NOTIFICATION</b>
International application No. PCT/AU99/00934	International filing date (day/month/year) 27 October 1999 (27.10.99)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 27 October 1998 (27.10.98)
Applicant ASTRACON INC et al	

1. The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
2. This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
3. An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, **the attention of the applicant is directed** to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
4. The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, **the attention of the applicant is directed** to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
27 Octo 1998 (27.10.98)	PP 6733	AU	08 Dece 1999 (08.12.99)

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. (41-22) 740.14.35</p>	<p>Authorized officer</p> <p style="text-align: right;">Taieb Akremi </p> <p>Telephone No. (41-22) 338.83.38</p>
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# PCT

## CHAPTER II

### DEMAND

under Article 31 of the Patent Cooperation Treaty:  
The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only	
Identification of IPEA	Date of receipt of DEMAND
<b>Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION</b>	
Applicant's or agent's file reference 2/7460/PC	
International application No. PCT/AU99/00934	International filing date (day/month/year) 27 October 1999
(Earliest) Priority date (day/month/year) 27 October 1998	
Title of invention MANAGEMENT OF TERMINATIONS IN A COMMUNICATIONS NETWORK	
<b>Box No. II APPLICANT(S)</b>	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)	
ASTRACON INC 10303 East Dry Creek Road Suite 250 Englewood, CO 80112 USA	
Telephone No.: +1.720.895.8500	
Facsimile No.: +1.720.895.8555	
Teleprinter No.:	
State (that is, country) of nationality: USA	State (that is, country) of residence: USA
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)	
ROSE, Ian Alexander 16 Pedley Street Wavell Heights Queensland 4012 Australia	
State (that is, country) of nationality: AUSTRALIA	State (that is, country) of residence: AUSTRALIA
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)	
State (that is, country) of nationality:	State (that is, country) of residence:
<input type="checkbox"/> Further applicants are indicated on a continuation sheet.	

**Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**The following person is ☒ agent ☐ common representativeand ☒ has been appointed earlier and represents the applicant(s) also for international preliminary examination.☐ is hereby appointed and any earlier appointment of (an) agent(s)/common representative is hereby revoked.☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)*FISHER ADAMS KELLY  
Level 13  
AMP Place  
10 Eagle Street  
Brisbane Queensland 4000  
AustraliaTelephone No.:  
+61.7.3229.2655Facsimile No.:  
+61.7.3221.0597

Teleprinter No.:

☐ **Address for correspondence:** Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.**Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION****Statement concerning amendments:\***

1. The applicant wishes the international preliminary examination to start on the basis of:

☒ the international application as originally filedthe description ☒ as originally filed  
☐ as amended under Article 34the claims ☒ as originally filed  
☐ as amended under Article 19 (together with any accompanying statement)  
☐ as amended under Article 34the drawings ☒ as originally filed  
☐ as amended under Article 342. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.3. ☐ The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). *(This check-box may be marked only where the time limit under Article 19 has not yet expired.)*

\* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

**Language for the purposes of international preliminary examination:** English☒ which is the language in which the international application was filed.☐ which is the language of a translation furnished for the purposes of international search.☐ which is the language of publication of the international application.☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.**Box No. V ELECTION OF STATES**The applicant hereby elects all eligible States *(that is, all States which have been designated and which are bound by Chapter II of the PCT)*

excluding the following States which the applicant wishes not to elect:

## Box No. VI CHECK LIST

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- |  |   |        |
|--|---|--------|
| 1. translation of international application                              | : | sheets |
| 2. amendments under Article 34   | : | sheets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : | sheets |
| 4. copy (or, where required, translation) of statement under Article 19  | : | sheets |
| 5. letter  | : | sheets |
| 6. other ( <i>specify</i> )  | : | sheets |

For International Preliminary  
Examining Authority use only

received not received

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>


The demand is also accompanied by the item(s) marked below:

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> fee calculation sheet                             | 4. <input type="checkbox"/> statement explaining lack of signature                                  |
| 2. <input type="checkbox"/> separate signed power of attorney                            | 5. <input type="checkbox"/> nucleotide and or amino acid sequence listing in computer readable form |
| 3. <input type="checkbox"/> copy of general power of attorney; reference number, if any: | 6. <input type="checkbox"/> other ( <i>specify</i> ):   |

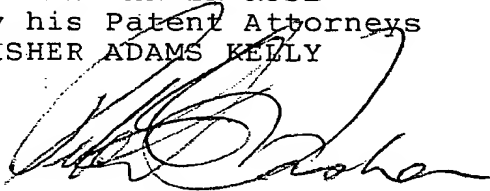
## Box No. VII SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

*Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).*

ASTRACON INC  
By its Patent Attorneys  
FISHER ADAMS KELLY

  
Peter C Fisher  
Registered Patent Attorney

IAN ALEXANDER ROSE  
By his Patent Attorneys  
FISHER ADAMS KELLY

  
Peter C Fisher  
Registered Patent Attorney

For International Preliminary Examining Authority use only

1. Date of actual receipt of DEMAND:

2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):

3. ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.

☐ The applicant has been informed accordingly.

4. ☐ The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.

5. ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.

For International Bureau use only

Demand received from IPEA on:

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

REC'D 28 JUN 2000

WIPO

PCT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2/7460	<b>FOR FURTHER ACTION</b>	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International application No. <b>PCT/AU99/00934</b>	International filing date ( <i>day/month/year</i> ) 27 October 1999	Priority Date ( <i>day/month/year</i> ) 27 October 1998
International Patent Classification (IPC) or national classification and IPC  <b>Int. Cl. <sup>7</sup> H04L 12/66, 29/02, H04Q 3/00</b>		
Applicant <b>ASTRACON INC et al</b>		

1.	This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of 4 sheets, including this cover sheet.  <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  These annexes consist of a total of      sheet(s).
3.	This report contains indications relating to the following items:  I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 2 May 2000	Date of completion of the report 21 June 2000
Name and mailing address of the IPEA/AU  AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer  <b>R.H. STOPFORD</b>  Telephone No. (02) 6283 2177

**I. Basis of the report**1. With regard to the **elements** of the international application:\*

- ☒ the international application as originally filed.
- ☐ the description,        pages , as originally filed,  
   pages , filed with the demand,  
   pages , received on    with the letter of
- ☐ the claims,                pages , as originally filed,  
   pages , as amended (together with any statement) under Article 19,  
   pages , filed with the demand,  
   pages , received on    with the letter of
- ☐ the drawings,            pages , as originally filed,  
   pages , filed with the demand,  
   pages , received on    with the letter of
- ☐ the sequence listing part of the description:  
   pages , as originally filed  
   pages , filed with the demand  
   pages , received on    with the letter of

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, was on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description,        pages
- ☐ the claims,            Nos.
- ☐ the drawings,        sheets/fig.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report



**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims 1-20	YES
	Claims	NO
Inventive step (IS)	Claims 1-20	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-20	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

US 5771230 A (Stoeckl et al) 23 June 1998

Logical access segments (ACC) related to communications terminals are installed and managed for each communications partner (KP) in a database (DB) of a communications system (KS), in particular an ATM communications system. An identification (ID) and information (vci, vpi, wi, tri, qi) representing physical resources (R) of the respective communications partner (KP), as well as allocated switching-oriented possibilities (s) is entered into each access segment (ACC). During a connection setup by a communications partner (KP), the information (vcpi, vci) representing the requested physical resources (R) is taken from the allocated logical access segment (ACC) and allocated to further segments (LUP, LCP, LINK) for the duration of the connection. Through the use of the logical access segments (ACC) in a switching procedure structure (CPS) of a communications system (KS), a separation of the switching procedures from the management and setting of the physical resources (R) related to the communications terminals is achieved. As a result a switching procedure structure (CPS) can be designed independently of the physical instances of a communications system (KS).

US 5650994 A (Daley) 22 July 1997

An operational support system includes service creation, service activation and service control functions to provide on-line service activation for video information providers (VIPs) and video information users (VIUs) on a video dial tone network. The operational support system provides an open interface for VIPs to remotely provision network resources by remotely accessing and requesting changes in corresponding VIP profiles, stored in the operational support system, in order to add/delete VIP subscribers, update event schedules, and/or to download billing and usage statistics. The operational support system processes the remote request by verifying the request data with internal subscriber databases, comparing the request with available network inventory, and provisioning network resources by generating requests to network elements to establish the new service. The operational support system also is adapted to perform network creation functions including initial network configuration, logical assignment of network elements, initializing network element systems, assignment of work orders for physical interconnections, and performance verification of installed systems.

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

**Continuation of V**

US 5574778 A (Ely et al) 12 November 1996

A system and method for video-on-demand and videoconferencing services using a broadband switch network, a broadband session controller, and a broadband service control point. The broadband network provides connections between information sender/receivers in response to instructions from a broadband service control point or in response to requests originated by an information sender/receiver. The broadband service control point processing instructions and/or data to the broadband controller and information sender/receiver. In addition, an integrated service control point integrates broadband and telephone networks to provide efficient and effective integrated broadband and telephone services. Both broadband and telephone services can be provisioned via a video interface at a user's remote location. Also, the integrated network provides unique caller identification delivery services.

US 5519689 A (Kim) 21 May 1996

A traffic control method and system for a broadband user-network interface which connects subscriber terminals to a public network in an ATM exchange including a broadband-terminal equipment, a local exchange which fixedly assigns virtual path identifiers in accordance with traffic characteristics and processes the traffic received through the assigned virtual path identifiers and a virtual channel identifier, and a broadband-network termination disposed between the broadband-terminal equipment and the local exchange for modulating and demodulating a signal transmitted/received and outputs a modulated/demodulated signal. The broadband-network termination includes a connection control unit for analyzing call establishment request information from one of a plurality of subscriber terminals to thereby detect a corresponding traffic class, quality of service and address of destination, and controlling connection admission based upon detected information and simultaneously outputting transmission bandwidth information to thereby assign a virtual channel identifier; a generic flow control unit for analyzing a generic function control field in a cell header of a received cell generated from a call connected through the connection admission control unit to fairly use public media used by the plurality of subscriber terminals for minimizing cell transmission delay; a traffic control unit for monitoring whether the received cell indicative of the call violates traffic parameters described by the calling subscriber terminal and controlling a cell loss priority bit in a corresponding cell header to thereby execute cell transmission, cell shaping, and cell discarding.

US 5042062 A (Lee et al) 20 August 1991

Broadband terminals, such as video terminals and a video conferencing system, are directly connected to broadband digital access crossconnect systems and connections between the terminals are established via the crossconnects and DS1 or DS3 interconnecting links under control of telephone exchanges associated with the different crossconnects. A broadband terminal is connected to an associated exchange, as well as, a crossconnect and a connection from one terminal to another may be requested by transmitting a special code to the exchange together with a directory number assigned to the desired broadband terminal. The central office, on the basis of the directory number, area code and exchange code, selects a broadband interconnecting link from the crossconnect to which the originating terminal is connected to the crossconnect to which the terminating terminal is connected. Furthermore, the originating exchange transmits the identity of the selected link and the directory number via a common channel signalling system to the exchange associated with the requested terminal. Both the originating and terminating exchanges transmit connect messages to their associated crossconnects to establish a broadband path between the two terminals.

The claims are novel and involve an inventive step, no citation or combination of citations discloses the determination of availability of a termination unit having the required features is present at a location or the allocation of a termination unit if there are multiple possible termination units. The claims are industrially applicable.